



31 March 2006 | \$10

Science



COVER

Bundles of rice crop hanging on bamboo sticks in Japan. The earliest farmers unknowingly selected a single base pair mutation in a regulatory gene that substantially reduced grain shattering of the wild progenitor of rice. This led to domestication of the world's leading food crop. See page 1936.

Photo: Dex/Getty Images

DEPARTMENTS

1831	Science Online
1832	This Week in Science
1836	Editors' Choice
1838	Contact Science
1841	NetWatch
1843	Random Samples
1863	Newsmakers
1878	AAAS News & Notes
1943	New Products
1944	Science Careers

EDITORIAL

1835 **In Search of Biosecurity**
by David A. Relman, Eileen Choffnes, Stanley M. Lemon

NEWS OF THE WEEK

Too Late, Earth Scans Reveal the Power of a Killer Landslide	1844
Foreign Grad Students Show Renewed Interest	1845
\$200 Million Gift for Ancient World Institute Triggers Backlash	1846
Genetic Screen Misses Mutations in Women at High Risk of Breast Cancer	1847
SCIENCESCOPE	1847
U.K. Government Aids Science Teaching, Streamlines Research Funding	1848
Physics Institute Settles Suit, Takes Steps to Increase Diversity	1848
Italy: CNR Reform Moves Ahead, But Critics Cry Foul	1849
Nanocolumns Give YBCO Wires a Big Boost	1850
>> Report p. 1911	
Versatile Sperm Cells May Offer Alternative to Embryos	1850
The Thick and Thin of Brainpower: Development Timing Linked to IQ	1851

NEWS FOCUS

A Cure for Medicine's Ailments?	1852
Broad Patent Faces Narrow Odds in Court Battle	1855
Lunar and Planetary Science Conference	1858
New Signs of Ancient Life in Another Martian Meteorite?	
Tumbling Icy Moons	
Roughed Up and Far From Home	
Snapshots From the Meeting	
American Physical Society Meeting	1860
Semiconductor Advance May Help Reclaim Energy From 'Lost' Heat	
In a Jumble of Grains, a Good Hard Shake Restores Order	
New Trick With Silicon Film Could Herald a Bright Future for Rolled-Up Nanotubes	

LETTERS

Invasive Plants <i>K. O. Reinhart</i>	1865
Response <i>D. Blumenthal</i>	
Save the Lab in Montemar, Chile <i>R. Borges et al.</i>	
Scrapie and the Origin of the Chinese "Itchy" <i>H.-Y. Zhang</i>	
Disease but No Sheep <i>P. Li and H. Xing</i>	

BOOKS ET AL.

Extinction How Life on Earth Nearly Ended 250 Million Years Ago <i>D. H. Erwin, reviewed by A. M. Bush</i>	1868
Power, Sex, Suicide Mitochondria and the Meaning of Life <i>N. Lane, reviewed by D. G. Nicholls</i>	1869



EDUCATION FORUM

Preparing Minority Scientists and Engineers <i>M. F. Summers and F. A. Hrabowski III</i>	1870
--	------

PERSPECTIVES

β-Glucans—Brewer's Bane, Dietician's Delight <i>K. Keegstra and J. Walton</i>	1872
>> Report p. 1940	
Dangerous Tectonics, Fragile Buildings, and Tough Decisions <i>R. Bilham</i>	1873
>> Research Article p. 1897	
An Antibody Paradox, Resolved <i>M. Prlic and M. J. Bevan</i>	1875
>> Report p. 1924	
A Neutron Star in F-sharp <i>J. E. Grindlay</i>	1876
>> Report p. 1901	

CONTENTS continued >>

U.K. BUDGET

Government Aids Science Teaching, Streamlines Research Funding

CAMBRIDGE, U.K.—In what has been deemed by many as a cautious 2006–’07 budget for the United Kingdom, there is much shuffling of responsibilities for science and technology funding but little new cash. In his 22 March budget statement, Chancellor Gordon Brown said the government will spend more on secondary school science education, restructure funding councils that oversee biomedical and physical sciences, and create a “radically simplified” method of allocating research overheads to universities. Brown also promised to foot half the bill for a new “virtual institute” to develop technologies that can help lower carbon emissions; five major energy companies have agreed to cofund it. Researchers are generally pleased by the changes, but many say they want to see the details, which should be made public in the next few weeks.

As part of a generous package for state secondary schools, Brown is proposing to spend \$53 million

training 3000 new science teachers who actually have degrees in the subjects they will teach—chemistry, physics, and biology. Unions are enthusiastic: Steve Sinnott, general secretary of the National Union of Teachers, said the government is to be “congratulated” for “exactly the kind of vision we want.”



Inside the box. A budget prepared by U.K. Chancellor Gordon Brown highlights the value of science but hews to steady-state funding.

But Brown’s rearranging of the science funding furniture has met with a mixed response. For example, he outlined a scheme to take the funding of the Medical Research Council and the research managed by the Department of Health and merge it into a single fund of “at least” \$1.74 billion per year. This tidying-up effort is “good news,” according to a statement by Mark Walport, director of the giant biomedical foundation the Wellcome Trust. But Walport is “concerned that the figure mentioned ... is considerably less” than the current total of the two agencies’ research budgets. A Treasury Department spokesperson says this number isn’t meant to be a cap but a general indicator of size, and that scientists will have a chance to debate it all before a decision is made later this year.

University of Edinburgh physicist Ian Halliday, president of the European Science Foundation, says he sees in this proposed merger a hint of the “British disease: Let’s take something that works and see if we can’t make it better.” It might be wiser to follow an American adage, he suggests: “If it ain’t broke, don’t fix it.” For the same reason, Halliday is wary of another proposal that would split the Particle Physics and Astronomy Research Council—a body he formerly headed—and merge the parts with two other councils. The aim is to give one research council responsibility for all spending on big research facilities, such as telescopes, particle accelerators, and neutron sources.

University leaders, however, seem ▶

PROFESSIONAL SOCIETIES

Physics Institute Settles Suit, Takes Steps to Increase Diversity

“This book is stolen. Written in part on stolen time, that is.” When science journalist Jeff Schmidt penned those words, he inadvertently began a 6-year legal tale that even he didn’t see coming. The yarn ended last month, as Schmidt settled a lawsuit against his former employer, the American Institute of Physics (AIP), which represents 10 professional societies.

In the suit, Schmidt claimed that AIP, based in College Park, Maryland, fired him in 2000 for protesting the lack of racial diversity on the editorial staff of AIP’s magazine *Physics Today*. AIP says it was responding to his claim that he used company time to write his book *Disciplined Minds: A Critical Look at Salaried Professionals and the Soul-Battering System That Shapes Their Lives*. The book’s first line says as much, although Schmidt says he was engaging in hyperbole.

Under the settlement, most of which is public, AIP admits no wrongdoing. Schmidt, who was an editor at *Physics Today* for 19 years, receives compensation for lost wages and benefits, pain and suffering, and legal fees. He

also got his job back—just long enough to resign—and a recommendation that says his work consistently met or exceeded requirements. “Getting any one of these terms would have surprised me,” Schmidt says. “Getting all of them is amazing.”

The Washington Lawyers Committee for Civil Rights and Urban Affairs, which helped represent Schmidt, reports in a press release that AIP also agreed in the settlement to support efforts by the National Society of Black Physicists (NSBP) and the National Society of Hispanic Physicists (NSHP) to become non-voting members. If invited, AIP will also conduct a science writing course at the next NSBP annual conference, according to the release. AIP would not comment on the settlement.

“Historically, AIP has always worked with the NSBP and NSHP to promote diversity,” says Marc Brodsky, AIP executive director and CEO. Brodsky says *Physics Today* now has at least one minority editor but that he doesn’t generally ask employees about their ethnicity.

As the dispute wore on, Schmidt, 59, became

a minor cause célèbre among some physicists. Hundreds signed a statement accusing AIP of squelching free expression.

Jean Kumagai, an editor at *Physics Today* from 1989 to 1999, says she and Schmidt raised the issue of workplace diversity with higher-ups. “We suggested that they actually practice what they had on paper as a policy,” says Kumagai, now an editor at *IEEE Spectrum* magazine. “And that didn’t go over too well.”

However, Graham Collins, an editor at *Scientific American* who worked at *Physics Today* from 1991 to 1998, says Schmidt deserves some of the blame for the conflict. “There were serious problems at the magazine, but he was one who tended to exacerbate the situation.”

Schmidt, who has not been employed since he was fired, credits researchers for speaking out. “I think physicists protested my firing because it made the institution of physics look as political as other fields,” he says. But, he adds, few voiced concern about racial diversity.

—ADRIAN CHO

CREDIT: KIRSTY WIGGLESWORTH/AP